Phillips County is located in North Central Montana along the Hi-Line. It encompasses 3.2 million acres with 33% being managed by the Bureau of Land Management and 48.5% as private lands. Other land managers in the area are Montana State Lands, U.S. Fish and Wildlife Service and the Fort Belknap Indian Reservation.

Agriculture is the main industry in Phillips County consisting of 54,000 mother cows, ranking third most in the state; 5,900 sheep; 157,400 acres of wheat; 20,000 acres of dry peas; and 40,000 acres of irrigated land. The gross value of all agricultural commodities in 2014 was over $60 million dollars excluding any government program.

Recreation is also an industry in the county. There is big game and upland bird hunting. Warm water fish species are available in the Milk and Missouri River, which make up the southern border of the county. There is one large irrigation reservoir, Nelson Reservoir, that has warm water sport fishing.

Welcome to Phillips County

Weather challenges agriculture

The spring, summer, and fall have all proven to be challenging for Phillips County agricultural producers. In the fall of 2016, Phillips County received a five-inch rain on top of the 20 inches the county received during the summer. Then the moisture stopped and the wind began to blow.

In the spring of 2017 the wind was so consistent the Glasgow National Weather Service measured soil water depletion to a depth of eight inches. Coupled with no measurable moisture countywide in June or July, the county ended the year with the worst drought in 33 years. Together with range and forest fires, the county lost over 30,000 acres of productive land to fire.

To meet these challenges, Extension provided educational programs in a timely manner. Specifically, Extension coordinated a drought meeting informing 25 producers about water quality, forage quality, and livestock management. Extension Beef Specialists, Dr. Megan Van Emon and Dr. Rachel Endecott provided best management practices under drought conditions. Additionally, producers received a handout with water quality standards for livestock use. The Extension office processed about five livestock water samples and 20 nitrate samples for producers.

Photo by Marko Manoukian

MSU Extension Beef Specialist Rachel Endecott informs livestock producers of livestock water quality problems.
**Extension assists with wool collection and Montana Ram Sale BBQ**

With the loss of the Montana State Extension Sheep Specialist to Wyoming, the Phillips County Extension agent took on more responsibility in delivering wool from six pools in the Eastern Consolidated Pool. In 2017, the six pools delivered 97,917 pounds of wool from 89 growers worth a total of $180,442. This volume of wool represents 5.4% of the total wool sold in Montana. There are 25 growers in the Hi-Line Pool, who represent Phillips County growers benefitting from this effort.

The Phillips County agent has also assisted the Montana Wool Growers by cooking a lamb lunch during the educational day at the annual Montana Ram Sale in Miles City in September. Extension agents from around the region assisted with the barbecue and serving lamb kababs to over 100 Wool Grower members.

**Prairie Dog control workshop**

Over the last few years, prairie dogs population has significantly increased on the land they occupy and new prairie dog towns have appeared. To address the control of prairie dogs, the Extension agent coordinated a program with Montana State Vertebrate Pest specialist Stephen Vantassel. Sixteen producers attended the workshop. Vantassel highlighted that due to prairie dog biology, control efforts must reach 90% to be successful or the pest is able to recolonize the area. Attendees received two private pesticide applicator recertification credits for attending.

**Fumigation Workshop**

Sixteen producers attended a fumigation workshop in February of 2017. The workshop was coordinated by the county Extension agent with Extension Pesticide Specialist Cecil Tharp. Attendees received six recertification credits for attending while receiving information on fumigation products, techniques, and safety. Fumigation is an issue with trading partners in India, which is a concern for many producers of peas and lentils produced in Phillips County. Fumigation is important to make sure a quality product is not damaged by an unwanted grain pest. Pests can be a problem in farm storage bins, and in railroad cars that haul the commodity to centralized U.S. consumer outlets or port terminals. If the railroad car is contaminated with pests, the entire load of grain could be condemned. Furthermore, fumigants can be an effective tool for managing burrowing rodents when other methods are less effective.
This targeted fumigant training met a critical need of farm applicators. According to a statewide survey of private pesticide applicators by Tharp, 680 applicators responded. Fifty-nine percent of applicators surveyed indicated they used fumigants at some point. Of these, 28% indicated they would stop using fumigant products or hire a commercial applicator if there is a total lack of annual fumigant trainings. Ten percent of applicators indicated they will continue using fumigants even if they don’t follow all the EPA product label requirements. Forty seven percent of all private applicator respondents indicate it is very important to have extensive annual fumigant trainings available.

4-H continues to grow and teach life skills
The Phillips County 4-H program has grown this last year by adding a new club and increasing our youth participation by 11% over the previous year. Our adult leadership has also increased by 15%. The 4-H program has provided many at-risk youth with the opportunity to increase their life skills. Teens have stepped up in leadership skills by teaching Cloverbud youth about the different projects that the program has to offer and first year members the significance of eating healthy. We have also invited 4-H alumni to teach youth an awareness of the importance of voting by going through the process and the importance of raising healthy animals by learning the proper procedures for giving vaccinations to their animals.

July fire impacts livestock producer
The Extension agent also coordinated a pasture lease for a producer who lost pasture in the Zortman fire of July 3, 2017. Without this pasture, the livestock operator would have been short for 150 cow/calf pairs which lost summer and fall pasture due to the fire. This lease allowed the producer to keep and feed his cows and calves until his shipping date in October.

Thanksgiving Day fire 2017
Fires continued to plague the county into late fall. On Thanksgiving Day, a fire broke out from a suspected recreation vehicle malfunction and in the high winds and warm temperatures, it burned 10 miles in 2.5 hours. This fire consumed an estimated 8,000 acres. The Extension agent assisted the local landowners, along with many other volunteers, with fire suppression. A county agent’s job is never done for the weekend or over a holiday.
Youth attend multi-county camp

The Phillips County 4-H program has continued to work together with area counties to offer youth 8-12 years of age a chance to develop team building skills and lifelong relationships with peers. Eight counties saw a 33% increase in youth attending a three-day camp where youth participated in canoeing, archery, building robots and other team building exercises. They learned responsibilities such as self-discipline, cooperation, personal safety and problem solving. Teen leaders helped agents and adult leaders plan and implement the activities during the camp, which helped the teens build their planning, organizing and communication skills.